Camp Ibis Engineering Evaluation/Cost Analysis

Key Services

- Location Surveys and Mapping
- Geophysical Investigation
- Intrusive Investigations
- Technical Project Planning
- Institutional Analysis
- Impact Analysis
- Action Memorandum
- Community Relations Support

Location

San Bernardino County, California

Client

U.S. Army Corps of Engineers-Huntsville

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Project Manager

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Dates

03/00 – 02/03

Contract Type

Cost plus fixed fee

Contract / Job Numbers

DACA87-95-D-0018 / 737783

Project Description

Parsons was contracted to conduct an Engineering Evaluation/Cost Analysis (EE/CA) investigation of the former Camp Ibis (the Camp) in San Bernardino County, California for the U.S. Army Corps of Engineers (USACE) Engineering and Support Center (USAESCH) and the USACE Los Angeles District. The purpose of the EE/CA is to characterize ordnance and explosives (OE) contamination, analyze risk management alternatives, and recommend feasible OE risk reduction alternatives for the Camp.

In January 1942, the former Camp Ibis was established by General George S. Patton Jr. as part of a 12 million acre Desert Training Center (DTC), later named California-Arizona Maneuver Area (CAMA). Camp Ibis encompassed approximately 13,398 acres of the training area.

The Camp's mission was to train troops for desert warfare. During the time the Camp was in operation (1942-1944), various armor divisions were trained at the site. The first unit to occupy the Camp was the 4th Armored Division. Following that unit was the 7th, 9th, and 11th Armored Divisions. The M3 Stewart, M3 Grant and M4 Sherman tanks were operated during training. The troops would use both practice and live ammunition to provide a sense of real combat situations. The tanks would use 37mm, 75mm, and 76mm high velocity projectiles for their main guns and have .30 and .50 caliber machine guns mounted on top. Other munitions used by these units were 105mm howitzers; 3-inch, 40mm, 75mm, 90mm, 105mm, and 155mm projectiles; .45 caliber pistols/submachine guns; .30 caliber carbines and rifles; and Mark II fragmentation grenades. Several historic documents indicate that teargas was sprayed from airplanes passing over troops during training. Approximately 23 ranges are associated with the Camp. Only four of those ranges originated within Camp Ibis (proper). On March 16, 1944, the War Department declared Camp Ibis surplus and closed May 1, 1944.

During May 1964, the CAMA area was used to conduct a military exercise code named Desert Strike. The objective of this exercise was to train major combat organizations, as well as combat support/service units, in the execution of joint operations employing tactical nuclear

and conventional weapons. Simulators containing no radioactive components, 850 short tons of ordnance, and chemical class V ammunition were reportedly used. No documents have been located identifying the specific ordnance types. The current stakeholders of the Camp include: Department of the Interior - Bureau of Land Management (BLM); SF Pacific Properties, Incorporated; Kadiz Land Company; Santa Fe Pacific Gold (mineral rights); and State of California.

As part of the EE/CA effort, a variety of tasks will be conducted. Location surveys and mapping of the areas of interest are performed to identify the placement of sampling grids and "meandering paths" for the geophysical investigation. The geophysical investigation activities will include the use of grids and the "meandering path" geophysical methodology in order to delineate potential OE contamination at the Camp. The geophysical field effort will include the use of Global Positioning System (GPS) combined with the EM-61 MK2 Time Domain Metal Detector (pictured above) geophysical instrument selected during the equipment prove-out conducted during the week of January 29-February 2, 2001. These instruments can be used both manually and as towed-array systems. The Parsons Geophysical Coordinator will determine which anomalies recorded during the geophysical investigation will be intrusively investigated. The UXO subcontractor, American Technologies, Inc. (ATI), will perform the intrusive investigations of the selected anomalies. These tasks will characterize the OE contamination that may be present at the Camp.

In addition to the aforementioned activities, there are other tasks included in the EE/CA process. Technical Project Planning provides a mechanism for input from the Government and stakeholders regarding project objectives and constraints. Institutional Analysis is conducted to present site conditions in relation to ownership, zoning, future development plans and local and State participation in planning activities. An Impact Analysis model will be developed in order to determine the baseline public exposure and the predicted risk reduction for proposed remediation areas.

All of the preceding project components are compiled in the project EE/CA Report. The report includes removal action alternatives and a risk assessment for each area of interest at the Camp. Upon approval of the Final EE/CA Report, an Action Memorandum will be prepared and submitted to USAESCH for review. The Action Memorandum will recommend feasible OE risk reduction alternatives for the Camp. Throughout the EE/CA process, Parsons will provide community relations support to USAESCH.

Key project team members:

Parsons ES

- Ken Stockwell
- Don Silkebakken
- Greg Hedrick
- Andy Schwartz
- Mary Jo Enderby

Others

- Bureau of Land Management (BLM)
- Department of Toxic Substances Control (DTSC)
- USACE, Los Angeles District
- American Technologies, Inc.

Project Website

- *www.projecthost.com*